

REMARKS

Initially, the applicants would like to thank the Examiner for the effort which was put into the Final Office Action, particularly the explicit recitation of interpretations given to various terms which were set forth on pages 6-8 of the Final Office Action. While the applicants do not concede the merits of any of the pending rejections, the applicants believe that the detail included in the Final Office Action will help the applicants reach an agreement with the Examiner regarding patentability, or will help in the prompt identification of issues for appeal.

Further, the applicants would like to thank the Examiner for the courtesies extended during the telephonic interview of April 16, 2008. While no agreement was reached during that interview, in light of the current amendments and the remarks set forth herein, the applicants submit that the pending rejections should be withdrawn, and the claims should be allowed in their current form.

The claims were amended in accordance with the marked-up amendments, above. The amendments are being made to clarify the invention and to focus the claims on those aspects of the invention which are a commercial priority to the assignee. The amendments are fully supported by the specification, claims, and figures as originally filed. No new matter is believed or intended to be involved.

The Final Office Action mailed February 27, 2008, ("Final Office Action"), rejected claims 9-12 and 24 under 35 U.S.C. § 112 as indefinite; claims 1-12 and 14-39 under 35 U.S.C. § 102 as being anticipated by U.S. 6,167,383 ("Henson"); and claim 13 under 35 U.S.C. § 103 as obvious over Henson in view of allegedly admitted prior art. For the reasons set forth below, the applicants submit that pending claims are definite, and include limitations not taught or suggested in the art of record. Accordingly, for the reasons set forth herein, the applicants request that the outstanding rejections based on 35 U.S.C. §§ 112, 102, and 103 be withdrawn, and that the pending claims be allowed in their present form.

The Pending Claims Are Definite

The Final Office Action stated that claims 9-12 and 24 were indefinite because

The term ***correlation between [...] product component and [...] characteristic in a user profile***, appear to refer to a relative desirability or relative importance attached to a particular component by a customer based on data stored as part of consumer information, and as expressed via customer's selections on a screen. However, the claims do not provide a way to measure this ***relative*** affiliation.

Final Office Action at 5 (emphasis in original).

In response, the applicants have amended claims 9, 11, 12 and 24. Claim 10 has been cancelled. The remaining claims have been amended to replace references to the “correlation” which the Examiner argued was indefinite with references to a “suitability factor” of a component. Additionally, the claims have been amended to specify that the “suitability factor” is measured for “the intended use for the product.” The applicants further submit that no new matter is added by these amendments, and that support can be found in at least pages 16-18 of the application as originally filed. Accordingly, the applicants request that the pending rejections based on 35 U.S.C. § 112 be reconsidered, and that those rejections be withdrawn.

The Pending Claims Recite Limitations Not Taught or Suggested in the Art of Record

Claim 1

The Final Office Action rejected claim 1 under 35 U.S.C. § 102(e) as allegedly anticipated by Henson. Claim 1 is directed to a method for optimizing a product in which the content of a formatted display is determined at least in part by a characteristic of a user profile. Claim 1 also recites that the user profile is updated based on responses provided by the user, and that the updated profile is stored for determining the content presented by the formatted display during future optimization sessions. By contrast, Henson discloses an online store which generates a plurality of different views that are

customizable on a per customer basis.¹ The Final Office Action argued that Henson taught providing a formatted display because it could present consumer specific variations of online stores and checkouts.² The Final Office Action argued that updating the user profile and storing the updated user profile to determine the content of the formatted display for future presentation was taught by Henson's references to saving the user's shipping information (argued to be part of the user's profile) as well as saving a shopping cart (also argued to be a portion of a user profile) and viewing the contents of the saved cart at a later time.³ Essentially, the Final Office Action argued that the "user profile" recited in claim 1 was taught by storage or use of any customer information,⁴ and then, since Henson does save some information related to particular customers, rejected claim 1 based on that reference. Accordingly, while not conceding the pending rejections, in order to reach an agreement with the Examiner, the applicants have amended claim 1 to provide additional detail on the nature and use of the "user profile" recited in that claim, thereby obviating the pending rejections. An explanation of the specific amendments made, and how they distinguish Henson is set forth below.

Claim 1 Recites that the User Profile Comprises a Plurality of Characteristics not Found in Henson, and Recites that Those Characteristics are Used in Optimizing a Product and Determining Content to be Displayed in the Future

To differentiate from the definition of a "user profile" used in the Final Office Action, claim 1 has been amended to recite that the user profile comprises a plurality of characteristics of the user, and then lists three of those characteristics: a preferred social interaction type; a plurality of domain familiarity indications, each of which reflects the user's knowledge about a specific product domain; and a price sensitivity for the user. Claim 1 has also been amended to specify that the content of the formatted display is determined at least in part by one of those specified characteristics, and that updating the user profile comprises updating at least one of the specified characteristics. The

¹ Henson, col. 3, ll. 36-39.

² Final Office Action at 9.

³ Final Office Action at 9-10.

applicants submit that these amendments to claim 1 clearly overcome the outstanding rejection of that claim. First, the applicants submit that Henson does not include any teaching or suggestion of a user profile including the specific characteristics currently recited in claim 1. Further, even if such a profile were suggested in Henson, Henson does not teach the uses of that profile which are now recited in claim 1. For example, nowhere in Henson is there any disclosure that the content of a formatted display can be determined in part by the user's price sensitivity, a plurality of domain facility indicators, or a preferred social interaction type. Instead, the customizable features of Henson are controlled by the items in a user's shopping cart, and a link the user clicked to access an online store,⁵ neither of which includes the characteristics now recited for the user profile in claim 1. Similarly, while Henson teaches storage of the contents of a user's cart, Henson does not teach or suggest storage or updating of the user's price sensitivity, the domain familiarity indicators, or preferred social interaction type. Accordingly, because claim 1 now clearly recites those characteristics as part of the user profile, the applicants submit that the outstanding rejection of claim 1 should be reconsidered and withdrawn.

Claims 2-9, and 11-17

Initially, the applicants note that each of claims 2-9, and 11-17 depend, either directly or indirectly, from claim 1, and therefore include each novel limitation of that claim. Accordingly, the applicants submit that, in light of the above remarks regarding claim 1, the rejections of claims 2-9, and 11-17 based on Henson should be reconsidered and withdrawn. Additionally, the applicants note that claims 2-9, and 11-17 each recite further limitations which are not taught or suggested in the art of record. Explanations

⁴ Indeed, this definition was explicitly set forth on page 7 of the Final Office Action.

⁵ With respect to use of the cart, *see* col. 10, ll. 32-33 ("The items in the cart determine who the customer is."). With respect to the link, *see* col. 14, ll. 19 – 21 ("A customer is identified as being in a particular customer set according to what link the customer executed to get to the online store."). A customer set in Henson is not the same as a user profile as recited for at least the reason that, in Henson, customers and customer sets have an N to N mapping relationship, that is, one customer set can comprise many customers, and one customer may belong to many different customer sets. *See, e.g.*, Henson, col. 10, ll. 49-55 (describing how a customer can leave and reenter the online store of Henson to make purchases associated with two different customer sets).

of how certain of those limitations differentiate the pending claims from Henson are set forth below.

Claim 11 Recites that a Change to a Component is Determined which Maximizes a Suitability Factor for User's Intended use for a Product, and Recites that the Intended Use is a Characteristic Stored in the User's Profile

As an example of further limitations found in the dependent claims which are not taught or suggested in the art of record, the applicants note that claim 11 recites determining a change to a component which maximizes the suitability factor of the component for the user's intended use for the product, presenting the change in response to a user generated event, and implementing the change upon receipt of a confirming response. Additionally, based on a dependency from claim 9, claim 11 requires that the intended use be a characteristic of the user stored in the user profile. The Final Office Action argued that similar limitations regarding presenting customers with a possible change to a component was taught by col. 6, ll. 21-43 and col. 15 ll. 45-60 of Henson, which disclosed "messages for recommending options that may be better than others according to different configurations."⁶ In response, the applicants note that the cited sections of Henson disclose a merchandising module which can be used to emulate a salesperson, and provide up/cross sell messages to a customer.⁷ The applicants further note that Henson does not teach that the merchandising messages are provided to maximize a suitability factor of a component for a user's intended use for the product. Henson also does not teach that the intended use for a component is a characteristic which is stored in a user profile. Instead, Henson teaches that the merchandising messages are provided based on the contents of the user's shopping

⁶ Office Action at 12.

⁷ See Henson, col. 6, ll. 39-43 ("In addition, the merchandising module provides messaging, alternatively referred to herein as merchandising information or messaging, of options recommended to be selected in a particular configuration, including, for example, which options may be better than others."); col. 15, ll. 47-53 ("Merchandising is provided to better emulate what a sales representative would do if a customer telephones the online store vendor to inquire about a computer system, wherein the online store merchandising provides a potential to sell a customer a richer computer system. The merchandising of the online store better emulates selling and cross-selling merchandising than a sales representative could perform.").

cart.⁸ However, simply providing messages based on the contents of a cart does not teach or suggest providing a component change based on a user's intended use for a product, because merchandising messages can also be determined by looking at the contents of the cart, then suggesting that the customer purchase more of the same items, thereby achieving the vendor's desire for increased revenue. Indeed, Henson discloses its merchandising messages being presented in exactly that way, for exactly that reason.⁹ Thus, while Henson discloses that messages can be based on the vendor's desire for greater revenue (i.e., to sell a "richer" system), there is no teaching or disclosure that changes to components can be based on the user's intended use for the product. Further, there isn't even a hint that a suitability factor for that use is maximized in determining the change in components to present. Accordingly, as claim 11 requires both consideration of the intended use for the product, *and* maximization of the suitability factor in determining what component change to present to the user, the applicants submit that the limitations recited in claim 11 provide a further reason why the rejection of that claim should be reconsidered and withdrawn.

Claim 18

Claim 18 has been amended in a manner similar to that discussed above regarding claim 1. Accordingly, the applicants submit that the rejection of claim 18 should be reconsidered and withdrawn for at least the reasons provided above for claim 1.

⁸ Henson, col. 9, ll. 56-60 ("Further with respect to the shopping cart, merchandising recommendations can be provided based upon the contents of the shopping cart. That is, based upon the contents of the user's shopping cart, is there something that could be recommended as an upgrade or a cross-sell.").

⁹ Col. 15, ll. 47-56 ("Merchandising is provided to better emulate what a sales representative would do if a customer telephones the online store vendor to inquire about a computer system, wherein the online store merchandising provides a potential to sell a customer a richer computer system. The merchandising of the online store better emulates selling and cross-selling merchandising than a sales representative could perform. For example, merchandising may include up selling an extended service warranty, up selling more RAM, or a bigger hard drive or greater memory capacity.").

Claims 19-36

Initially, the applicants note that each of claims 19-36 depend, either directly or indirectly, from claim 18, and therefore include each novel limitation of that claim. Accordingly, the applicants submit that, in light of the above remarks regarding claim 18, the rejections of claims 19-36 based on Henson should be reconsidered and withdrawn. Additionally, the applicants note that claims 19-36 each recite further limitations which are not taught or suggested in the art of record. Explanations of how certain of those limitations differentiate the pending claims from the art of record are set forth below.

**While Henson, Teaches (at most) Providing a Set of
Content to a User, Claim 27 Recites Novel
Limitations Regarding How the Set of Content is
Determined**


Another example of a dependent claim which includes further limitations not taught or suggested in the art of record is claim 27. Claim 27 recites instructions for accessing a description of an option in a set of options corresponding to a component. Claim 27 also recites that that description is compared with a characteristic in the user profile as part of a function for determining the set of content provided by a formatted display. The Final Office Action, in rejecting claim 27, stated that those features were disclosed in figure 5 of Henson.¹⁰ However, as shown on the following page, figure 5 of Henson simply illustrates a configuration screen in which all system options are presented to a user.¹¹

¹⁰ See, Final Office Action at 18.


¹¹ Henson, col. 4, ll. 9-12 ("FIG. 5 illustrates a portion of an exemplary page including an alternate presentation view of a configuration screen of the on-line store, the alternate presentation view including all system options").

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Fig. 5


The Online Store
 POINT, CLICK, CONFIGURE, BUY. IT DOESN'T GET ANY EASIER.

Buy Online or Call:
 1-800-WWW-DELL



DELL DIMENSION XPS R
 Built with high performance and reliability in mind, the Dell Dimension XPS R series use the latest in technology to deliver the tremendous speed your high-end applications are craving.

Configured Price: *
 \$2,307
 \$87/month
 36-Month Lease**
☐ Business
☒ Personal

Using this Page
 Please select from the options listed to configure your system. Click "UPDATE PRICE" to make the price reflect any changes made to system options. When done, click "ADD TO CART" to keep shopping.

Choose Your View
 Find the view that's right for you.

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- ☐ Drop-down list view
- ☐ View all system options
- ☐ Print view (read only)

 Please use the "Print view" if intending to elect us to your interest in this system via fax.

Know the Codes!
 Recognizing them will help you build the system that's right for you.

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- ☐ Help Me Choose - This icon signals the presence of additional information to help you with your selection. Click on the icon to view more details on available options.
- ☐ Compatibility Check - Options flagged with this icon require a check for compatibility with other system options. An icon does not mean your configuration is invalid, rather only that a check is needed.
- ☐ Lead Time Warning - Items flagged with this icon will cause a delay in the shipment of your order. Click on the icon where displayed for more details.

1 selection may require changes to other configuration choices. Check below.
Dell Dimension XPS R MiniTower
☒ Pentium II processor, 400MHz with 512KB L2 Cache

Memory
 The XPS R series features 100MHz SDRAM memory for faster RAM performance than the popular 66MHz memory.

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- ☐ 64MB SDRAM [subtract \$30]
- ☐ 96MB SDRAM
- ☐ 128MB SDRAM [add \$60]
- ☐ 256MB SDRAM [add \$349]
- ☐ 384MB SDRAM [add \$648]
- ☐ 64MB SDRAM with ECC [subtract \$40]
- ☐ 128MB SDRAM with ECC [add \$109]
- ☐ 256MB SDRAM with ECC [add \$398]
- ☐ 384MB SDRAM with ECC [add \$648]

Hard Drive ☒ HELP ME CHOOSE
 A larger hard drive provides more storage for your operating system, Internet files, applications, graphics and scanned images! Dell offers EIDE hard drives up to 16.8 GB.

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- ☐ 10GB 7200rpm Ultra ATA Hard Drive [subtract \$119]
- ☐ 10GB 5400rpm Ultra ATA Hard Drive [subtract \$188]
- ☐ 13.6GB 5400rpm Ultra ATA Hard Drive [subtract \$149]
- ☐ 14.4GB 7200rpm Ultra ATA Hard Drive
- ☐ 16.8GB 5400rpm Ultra ATA Hard Drive

Monitor ☒ HELP ME CHOOSE
 Upgrading to a larger monitor is surprisingly affordable. Dell's line-up of exceptional monitors can deliver enhanced resolution and refresh rates, crisp, vibrant imaging and amazing color depth.

92 {

- ☐ 1600HS 21" (19.8" vis., 26dp, 1600 x 1200 max res.) Trinitron Monitor [add \$378]
- ☐ 1200HS 19" (17.9" vis., 26dp) Monitor [add \$79]
- ☐ 1000HS 17" (16.0" vis., 26dp) Trinitron Monitor
- ☐ 1000LS 17" (15.9" vis.) Monitor [subtract \$119]
- ☐ Video Ready w/o Monitor [subtract \$349]

Video Card ☒ HELP ME CHOOSE
☒ ATI XPERI 98D 8MB 3D 2X AGP Graphics Card [subtract \$29]

Henson, figure 5: a configuration screen in which all system options are presented to a user.

Figure 5 of Henson does not describe the functions that are used to generate the configuration screen, let alone teaching that the function used for determining the set of

content comprises comparing a description of an option with a characteristic in a user profile. Nonetheless, the Final Office Action supported its rejection of claim 27 by stating that

[t]he function *may* also comprise a comparison of the description with the characteristic in the user profile. For example, the user profile *may* indicate a need for a computer with memory. The displayed information contains component information concerning memory; the description of various types of memory may include information such as SDRAM with ECC, as shown in Fig. 5.¹²

The applicants submit that that statement is pure speculation, and, as such, cannot be the basis of a rejection based on 35 U.S.C. § 102. The law is clear that "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference."¹³ In this case, it is clear that the cited portion of Henson does not expressly describe the comparison of a description of an option with a characteristic in a user profile as being part of the function which determines the display of an interface, as the cited portion of Henson simply does not address how the content of the interface is determined. Accordingly, the rejection of claim 27 would only be proper if the comparison recited in that claim is inherently disclosed in Henson. For a limitation to be inherently disclosed, it must *necessarily* follow from the cited reference's explicit disclosure.¹⁴ In this case, the use of a function such as recited in claim 27 is not necessarily present in the system of Henson. Indeed, the Final Office Action itself asserted only that "[t]he function *may* also comprise a comparison of the description with the characteristic in the user profile." This is clearly insufficient to support a rejection based on inherency.¹⁵ Accordingly, as the limitations recited in claim 27 are neither expressly nor inherently disclosed in the art of record, the rejection of that claim should be reconsidered and withdrawn.

¹² Office Action at 18 (emphasis added).

¹³ MPEP § 2131, quoting *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628 (Fed. Cir. 1987).

¹⁴ MPEP § 2112, quoting *In re Robertson*, 169 F.3d 743 (Fed. Cir. 1999) ("To establish inherency, the extrinsic evidence 'must make clear that the missing descriptive matter is necessarily present in the thing described in the reference'").

**Claim 37 Recites that the User Profile is Used to
Model the User, and that it Comprises both Data
Collected Through Explicit User Selections, and
Data Inferred from User Actions**

Like claim 1, claim 37 was rejected as allegedly anticipated by Henson.¹⁶ Like claim 1, claim 37 previously recited a user profile, and has been amended to further specify the nature of that profile. Additionally, claim 37 has been amended to specify that a set of content provided to a user is determined at least in part by a set of data used to model the user which is inferred from user actions. As discussed previously with respect to claim 1, the Final Office Action's rejections were essentially based on the premise that the "user profile" which was recited in the claims was taught by the storage or use of any customer information, for example, a shopping cart.¹⁷ In response, claim 37 has been amended to provide additional detail related to the user profile: that it is used to model the user, that it comprises a first set of data collected through explicit user selections, and that it comprises a second set of data inferred from user actions. Such a user model is clearly different from the shopping cart of Henson. At most, a shopping cart such as taught in Henson would include data collected through explicit user selections (e.g., selections of items to purchase). However, there is no teaching or suggestion anywhere in Henson that the data in the shopping cart is used to model the user, or that the data in the shopping cart includes data inferred from user actions. Indeed, the applicants note that if the shopping cart of Henson were modified to include items which the user *didn't* select, then the user would have to remove those items before checkout to avoid having to pay for them. This would result in the invention of Henson being less suited for its intended purpose, and shows that the shopping cart of Henson is clearly different from the user profile recited in claim 37. Accordingly, the rejection of claim 37 should be withdrawn, and that claim should be allowed in its current form.

¹⁵ MPEP § 2112, quoting *In re Rijkkaert*, 9 F.3d 1531 (Fed. Cir. 1993) ("The fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic.") (emphasis in original).

¹⁶ Final Office Action at 21-22.

¹⁷ The discussion of the rejection of claim 1 is particularly applicable to the rejection of claim 37, because the Final Office Action's rejection of claim 37 consisted largely of citations to the rejection of claim 1, and did not include any independent analysis.

Claims 38-40

The applicants note that claims 38-40 depend from claim 37, and therefore include each novel limitation of that claim. Accordingly, the applicants submit that, in light of the above remarks regarding claim 37, the rejections of claim 38 and 39 based on Henson should be reconsidered and withdrawn, and all claims, including new claim 40, should be allowed in their current form.

New Claim 40 Recites Providing a Recommendation to a User and, Based on the User's Response to the Recommendation, Increasing or Decreasing the Weight of a Characteristic in the User Profile

In addition to being allowable for the reasons given above regarding claim 37, new claim 40 can also be distinguished from the art of record based on its novel limitations regarding updating a user profile. In the Final Office Action, the Examiner argued that updating a user profile was taught by references to a user being able to provide his or her shipping information.¹⁸ While not conceding that allowing a user to provide shipping information actually teaches updating a user profile, the applicants note that allowing a user to change his or her shipping information does not change a weight on a characteristic in a user profile. Indeed, the applicants note that an address for an order is not a characteristic which would be weighted in any case, because an address is a Boolean characteristic (i.e., you either ship a package to the right address or you don't), while a weight is only applicable to characteristics which can have values on a scale (e.g., a user cares more or less about the price of a component). Accordingly, because claim 40 recites increasing or decreasing the weight for a characteristic based on the user's response to a recommendation, and because such a weight modification is clearly not taught or suggested in Henson, claim 40 should be allowed in its current form, even if the arguments set forth above regarding claim 37 are not accepted.

Remarks Regarding Amendments

Regarding the amendments made herein, the applicants note that no new matter is believed or intended to have been introduced by those amendments, and that each of those amendments finds support in the application as originally filed. For the amendments regarding particular characteristics which could be present in a user profile, the applicants note that support for those amendments can be found under the heading "User Profile," on pages 10-14 of the specification as originally filed. In particular the applicants draw the Examiner's attention to page 14, which sets forth a list of representative characteristics which could be part of a user profile. For the amendments regarding the use of suitability factors, the applicants note that suitability factors are discussed under the heading "Knowledge Database". In particular, the applicants draw the Examiner's attention to the discussion on page 16 regarding the use of a desirability scale for the suitability factors, and Table 2 on page 18, which is an exemplary application use quality table. Finally, regarding new claim 40, the applicants submit that support for that claim can be found in at least the discussion starting on line 33 of page 36, and ending on line 24 of page 37 of the application as originally filed.

Information Disclosure Statement

In addition to the claims discussed above, the Final Office Action also stated that there were deficiencies in an information disclosure statement filed on December 31, 2007, and stated that the information included in that IDS had not been considered. In response, while not conceding that the Examiner was correct in refusing to consider the references listed in the previous information disclosure statement, a new information disclosure statement is being submitted.

¹⁸ Final Office Action at 9.

CONCLUSION

In light of the arguments made herein, it is respectfully submitted that the claims of the present application meet the requirements of patentability under 35 U.S.C. §§ 102, 103 and 112. Accordingly, reconsideration and allowance of these claims are earnestly solicited. Additionally, the applicants submit that the arguments made herein do not constitute an exhaustive list of the novel limitations found in claims 1-9 and 11-39 which are not taught or suggested in the art of record. To the extent that the applicants have not addressed certain aspects of the present rejection, please do not construe the same as an admission as to the merits of the rejections. Indeed, the applicants reserve all rights with respect to arguments not explicitly raised herein. Further, the applicants state that, while certain characterizations were accepted for the purpose of making certain arguments, the applicant accepted those characterizations for the purpose of presenting those specific arguments only, and did not intend for those acceptances to be treated as concessions. The applicants encourage the Examiner to contact their representative, William Morriss at (513) 651-6915 at **wmorris@fbtlaw.com** if further questions remain as to the patentability of any of the claims pending in this application.

The Commissioner for Patents is hereby authorized to charge any deficiency or credit any overpayment of fees to Frost Brown Todd LLC Deposit Account No. 06-2226.

Respectfully Submitted,

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